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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,175	02/07/2002	Frank J. Chu	PT-035	1300
7590 09/29/2005			EXAMINER	
JOHN W. OLIVO, JR. WARD & OLIVO 382 SPRINGFIELD AVENUE SUMMIT, NJ 07901			JOO, JOSHUA	
			ART UNIT	PAPER NUMBER
			2154	

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/072,175	Applicant(s) CHU ET AL.	
	Examiner Joshua Joo	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

9

Art Unit: 2154

1. Claims 1-5 are presented for examination.

Claim Rejections - 35 USC § 112

2. Claims 1-2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- i) As per claim 1, "said active speaker packets" in section (6) lacks proper antecedent basis. Examiner will interpret "said active speaker packets" as "said second audio packets".

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over of Baxley et al, US Publication #2004/0085913 (Baxley hereinafter), in view Kung et al, US Patent #6,671,262 (Kung hereinafter).

5. As per claim 1, Baxley teaches substantially the invention as claimed including a method for audio conferencing between clients of a circuit switched network and clients of a packet switched network. Baxley's teachings comprise of:

receiving a first audio packet, wherein said first audio packet is a mixture of packets received from each of the second plurality of clients who have been designated as an active

Art Unit: 2154

speaker by said circuit-switched conferencing server (Paragraph 0050. Audio input is received from GSTN endpoints.);

receiving, by said packet-switched conferencing server, a plurality of audio packets, wherein said plurality of audio packets comprises a second audio packet from each of the first plurality of clients who have been designated as an active speaker by said packet-switched conferencing server (Paragraph 0050. Audio input is received from packet-based endpoints.);

forwarding said second audio packets to said second plurality of clients (Paragraph 0051; 0052. Output stream is transmitted to the GSTN endpoints.)

mixing said first audio packet with said active speaker packets from the first plurality of clients into a composite packet (Paragraph 0050; 0054. Audio inputs are mixed. Sum stream represents the mixed input of all selected inputs.); and

forwarding said composite packet to each of the first plurality of clients connected to said packet-switched conferencing server (Paragraph 0052. Sum stream is directed to the packet-based endpoints.);

whereby the first and second plurality of clients, using varying equipment and protocols, can simultaneously participate in a single audio conference application (Fig. 1; GSTN endpoints are based on packet-based network, packet-based endpoints are based on packet-based network.).

6. Baxley teaches of a single server, containing a plurality of MCUs, which serves as both a packet-switch conferencing server and a circuit-switched conferencing server. However, Baxley does not teach of a separate packet-switch conferencing server and a circuit-switched conferencing server, thereby establishing by a packet-switched conferencing server, a connection to a circuit-switched conferencing server; designating said connection as an active

Art Unit: 2154

speaker on said packet-switched conferencing server; and forwarding, over said connection, said second audio packet to said circuit-switched conferencing server.

7. Kung teaches of audio conferencing between users of IP based networks and PSTN based networks (Col 3, lines 26-33), where a plurality of conferencing servers are implemented for communication between users (Col 31, lines 29-30). A first conference server connects and transmits the voice packets of the users of the first conference server to the second conference server (Col 31, lines 42-50).

8. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Baxley and Kung because both teachings are similar in that they deal with audio conferencing between users of a circuit switch network and a packet switch network. Furthermore, the teachings of Kung to provide a plurality of conference servers and transmits audio packets from one conference server to another conference server would improve the teachings of Baxley by allowing a greater number of users to participate in audio conferencing by distributing the server load to the plurality of servers. Using a single conference server may limit the number of participating users as the single server may become more easily overloaded.

9. As per claims 3 and 5, Baxley teaches substantially the invention as claimed including a method and a computer readable storage medium for audio conferencing between clients of a circuit switched network and clients of a packet switched network. Baxley's teachings comprise of:

receiving a first audio packet, wherein said first audio packet is a mixture of packets received from each of the second plurality of clients who have been designated as an active

speaker by the said packet-switched conferencing server (Paragraph 0050. Audio input is received from packet-based endpoints.);

receiving, by said circuit-switched conferencing server, a plurality of audio packets, wherein said plurality of audio packets comprises a second audio packet from each of the first plurality of clients who have been designated as an active speaker by said circuit-switched conferencing server (Paragraph 0050. Audio input is received from GSTN endpoints.);

mixing said first audio packet and said second audio packet into one combined audio packet (Paragraph 0050; 0054. Audio inputs are mixed. Sum stream represents the mixed input of all selected inputs.);

forwarding said one combined audio packet to each of the first plurality of clients connected to said circuit-switched conferencing server (Paragraph 0052. Sum stream is directed to the GSTN endpoints.); and

forwarding said second audio packet to said second plurality of clients (Paragraph 0052. Output stream is transmitted to the packet-based endpoints.);

whereby the first and second plurality of clients, using varying equipment and protocols, can simultaneously participate in a single audio conference application (Fig. 1; GSTN endpoints are based on packet-based network, packet-based endpoints are based on packet-based network.).

10. Baxley teaches of a single server, containing a plurality of MCUs, which serves as both a packet-switch conferencing server and a circuit-switched conferencing server. However, Baxley does not teach of a separate packet-switch conferencing server and a circuit-switched conferencing server, thereby establishing by a packet-switched conferencing server, a connection to a circuit-switched conferencing server; designating said connection as an active

Art Unit: 2154

speaker on said packet-switched conferencing server; and forwarding, over said connection, said second audio packet to said circuit-switched conferencing server.

11. Kung teaches of audio conferencing between users of IP based networks and PSTN based networks (Col 3, lines 26-33), where a plurality of conferencing servers are implemented for communication between users (Col 31, lines 29-30). A first conference server transmits the voice packets of the users of the first conference server to the second conference server (Col 31, lines 42-50).

12. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Baxley and Kung because both teachings are similar in that they deal with audio conferencing between users of a circuit switch network and a packet switch network. Furthermore, the teachings of Kung to provide a plurality of conference servers and transmits audio packets from one conference server to another conference server would improve the teachings of Baxley by allowing a greater number of users to participate in audio conferencing by distributing the server load to the plurality of servers. Using a single conference server may limit the number of participating users as the single server may become more easily overloaded.

13. As per claim 4, Baxley teaches substantially the invention as claimed including a computer readable storage medium for audio conferencing between clients of a circuit switched network and clients of a packet switched network. Baxley's teachings comprise of:

computer readable program code means for causing the computer to receive, a first audio packet, wherein said first audio packet is a mixture of packets received from each of the

Art Unit: 2154

second plurality of clients who have been designated as an active speaker by said circuit-switched conferencing server (Paragraph 0050. Audio input is received from GSTN endpoints.);

computer readable program code means for causing the computer to forward said first audio packet to each of the first plurality of clients connected to said packet-switched conferencing server (Paragraph 0051; 0052. Output stream is transmitted to the packet-based endpoints.);

computer readable program code means for causing the computer to receive, by said packet-switched conferencing server, a plurality of audio packets, wherein said plurality of audio packets comprises a second audio packet from each of the first plurality of clients who have been designated as an active speaker by said packet-switched conferencing server (Paragraph 0050. Audio input is received from packet-based endpoints.); and

computer readable program code means for causing the computer to forward said second audio packet to said second plurality of clients (Paragraph 0051; 0052. Output stream is transmitted to the GSTN endpoints.);

whereby the first and second plurality of clients, using varying equipment and protocols, can simultaneously participate in a single audio conference application (Fig. 1; GSTN endpoints are based on packet-based network, packet-based endpoints are based on packet-based network.).

14. Baxley teaches of a single server, containing a plurality of MCUs, which serves as both a packet-switch conferencing server and a circuit-switched conferencing server. However, Baxley does not teach of a separate packet-switch conferencing server and a circuit-switched conferencing server, thereby establishing by a packet-switched conferencing server, a connection to a circuit-switched conferencing server; designating said connection as an active

Art Unit: 2154

speaker on said packet-switched conferencing server; and forwarding, over said connection, said second audio packet to said circuit-switched conferencing server.

15. Kung teaches of audio conferencing between users of IP based networks and PSTN based networks (Col 3, lines 26-33), where a plurality of conferencing servers are implemented for communication between users (Col 31, lines 29-30). A first conference server transmits the voice packets of the users of the first conference server to the second conference server (Col 31, lines 42-50).

16. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Baxley and Kung because both teachings are similar in that they deal with audio conferencing between users of a circuit switch network and a packet switch network. Furthermore, the teachings of Kung to provide a plurality of conference servers and transmits audio packets from one conference server to another conference server would improve the teachings of Baxley by allowing a greater number of users to participate in audio conferencing by distributing the load to the plurality of servers. Using a single conference server may limit the number of participating users as a single server may be overloaded.

17. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baxley and Kung, in view of Goldstein, US Patent #6,940,971.

18. As per claim 2, Baxley does not teach the method of claim 1, wherein said composite packet is forwarded with echo suppression.

19. Goldstein teaches of providing echo suppression in communication between users (Col 1, lines 24-34; Col 4, lines 33-47).

Art Unit: 2154

20. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Baxley, Kung, and Goldstein because the teachings of Goldstein to provide echo suppression would improve the quality of service of the system of Baxley and Kung by reducing or canceling echo, thus providing better sound quality when users are communicating.

Conclusion

21. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action.

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Joo whose telephone number is 571 272-3966. The examiner can normally be reached on Monday to Thursday 8AM to 5PM and every other Friday.

23. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on 571 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

24. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/072,175

Page 10

Art Unit: 2154

September 21, 2005

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